

THE PENDING CLAIMS:

1. (Previously Presented) A system for controlling an internal combustion engine having a plurality of cylinders and mounted on a vehicle, comprising:

an engine operation controller that conducts a switching control of engine operation based on a load of the engine between a full-cylinder operation in which all of the cylinders are operative and a cut-off cylinder operation in which some of the cylinders are inoperative; and

a running controller that conducts a running control of the vehicle including at least one of a cruise control in which the vehicle runs at a desired vehicle velocity and a preceding vehicle follow-up control in which the vehicle runs at a desired vehicle velocity to maintain a desired inter-vehicle distance from a preceding vehicle;

wherein the engine operation controller switches engine operation to the full-cylinder operation if it is determined that deceleration is required by the running controller when the running controller conducts at least one of the cruise control and the preceding vehicle follow-up control.

2. (Canceled)

3. (Original) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and switches engine operation to the full-cylinder operation when a device that is manipulated by an operator to input the instruction to decelerate the vehicle is kept manipulated for a predetermined period of time or more.

4. (Previously Presented) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller

and switches engine operation to the full-cylinder operation when a difference between a detected vehicle velocity and the desired vehicle velocity is equal to or greater than a predetermined value.

5. (Previously Presented) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and switches engine operation to the full-cylinder operation when change of the desired vehicle velocity is equal to or greater than a predetermined value.

6. (Previously Presented) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and switches engine operation to the full-cylinder operation if change of the desired vehicle velocity is equal to or greater than a predetermined value when the preceding vehicle follow-up control is in progress.

7. (Original) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and switches engine operation to the full-cylinder operation when a gradient of a road on which the vehicle runs is equal to or less than a predetermined gradient threshold value.

8. (Original) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and switches engine operation to the full-cylinder operation if a throttle valve is fully closed or is almost fully closed when the running control is in progress.

9. (Original) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and

switches engine operation to the full-cylinder operation when an accelerator pedal is not manipulated by an operator.

10. (Original) A system according to claim 1, wherein the engine operation controller determines that deceleration is required by the running controller and switches engine operation to the full-cylinder operation when a supply of fuel to the engine is cut off.

11. (Original) A system according to claim 1, wherein the engine operation controller switches engine operation to the cut-off cylinder operation when it is determined that deceleration is not required by the running controller, after switching engine operation to the full-cylinder operation.

12. (Previously Presented) A method of controlling an internal combustion engine having a plurality of cylinders and mounted on a vehicle, comprising the steps of:
conducting a switching control of engine operation based on a load of the engine between a full-cylinder operation in which all of the cylinders are operative and a cut-off cylinder operation in which some of the cylinders are inoperative; and

conducting a running control of the vehicle including at least one of a cruise control in which the vehicle runs at a desired vehicle velocity and a preceding vehicle follow-up control in which the vehicle runs at a desired vehicle velocity to maintain a desired inter-vehicle distance from a preceding vehicle;

wherein the step of engine operation control switches engine operation to the full-cylinder operation if it is determined that deceleration is required by the step of running control when the running controller conducts at least one of the cruise control and the preceding vehicle follow-up control.

13. (Canceled)

14. (Original) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation when a device that is manipulated by an operator to input the instruction to decelerate the vehicle is kept manipulated for a predetermined period of time or more.

15. (Previously Presented) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation when a difference between a detected vehicle velocity and the desired vehicle velocity is equal to or greater than a predetermined value.

16. (Previously Presented) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation when change of the desired vehicle velocity is equal to or greater than a predetermined value.

17. (Previously Presented) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation if change of the desired vehicle velocity is equal to or greater than a predetermined value when the preceding vehicle follow-up control is in progress.

18. (Original) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation when a gradient of a road

on which the vehicle runs is equal to or less than a predetermined gradient threshold value.

19. (Original) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation if a throttle valve is fully closed or is almost fully closed when the running control is in progress.

20. (Original) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation when an accelerator pedal is not manipulated by an operator.

21. (Original) A method according to claim 12, wherein the step of engine operation control determines that deceleration is required by the step of running control and switches engine operation to the full-cylinder operation when a supply of fuel to the engine is cut off.

22. (Original) A method according to claim 12, wherein the step of engine operation control switches engine operation to the cut-off cylinder operation when it is determined that deceleration is not required by the step of running control, after switching engine operation to the full-cylinder operation.